

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of

U.S. Patent No. : US 6,392,863 B1  
Issued : May 21, 2002  
Title : BANKNOTE VALIDATOR  
Docket No. : INN 0004 PA

Commissioner for Patents  
Certificate of Correction Branch  
Washington, DC 20231

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on September 16, 2002.

*Susan M. Luna*  
Susan M. Luna, Patent Agent

Reg. No. 38,769

Sir:

**REQUEST FOR CERTIFICATE OF CORRECTION FOR PTO MISTAKE**  
**UNDER 35 U.S.C. 254 and 37 C.F.R. 1.322**

In the matter of U.S. Patent No. 6,392,863 B1, it is respectfully requested that a Certificate of Correction be issued to cover the following errors on the attached Certificate of Correction (PTO/SB/44) which occurred in the printing of the patent.

**REMARKS**

It is respectfully requested that a Certificate of Correction be issued for the above-identified patent. All of the errors occurred during the printing of the patent and, therefore, no fee is due. Two (2) copies of the required Certificate of Correction Form PTO/SB/44 are enclosed.

Respectfully submitted,  
KILLWORTH, GOTTMAN, HAGAN  
& SCHAEFF, L.L.P.

By *Susan M. Luna*  
Susan M. Luna  
Registration No. 38,769

One Dayton Centre  
One South Main St., Suite 500  
Dayton, Ohio 45402-2023  
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Encl.

COPY

PTO/SB/44 (02-01)

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(Also Form PTO-1050)

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION****PATENT NO** : 6,392,863 B1**DATED** : May 21, 2002**INVENTOR(S)** : Peter Dunlop, Kevin Ashurst

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**(57) ABSTRACT**

The abstract should read as follows:

--A banknote validator includes magnetic and optical sensors (305, 306, 307) and a non-return gate in its banknote path (80).

The magnetic sensor (307) comprises a magnetic circuit and an electronic circuit. The magnetic circuit comprising a yoke (402) and two giant magneto-resistors (400, 401) and the electronic circuit comprises a coil (407) arranged to generate a magnetic field in the yoke (402) and first and second feedback control loops. The first loop is responsive to the output of the first giant magneto-resistor (400) to energise the coil (407) so that the giant magneto-resistor operates in a predetermined region of its characteristic. The second loop is responsive to the differential between the giant-magneto-resistor outputs to generate a bias voltage for the second giant-magneto-resistor (401) tending to cause the differential to be zero.

The optical sensor (305,306) comprises a trapezoidal light guide (34, 104), a broadband light source (350) for illuminating a banknote via the light guide (34, 104) and sensors (351, 352, 353) for detecting light reflected from the banknote via the light guide (34, 104). Filters (354, 355, 356) are arranged in front of the sensors (351, 352, 353). The light guide (34,104) is inclined relative to the banknote path (6).

The non-return gate (80) does not need to be actively driven but falls when a banknote has passed and, when the banknote's direction of travel is reversed, guides the banknote along an accept path. If the banknote has not fully passed the non-return gate (80) when its direction is reversed, it is driven back to the validator's note insertion slot.--;

Col. 1, after the title, insert the following --The present invention relates to a banknote validator.--;

Col. 1, line 13, "have be en used" should be --have been used--;

Col. 5, line 27, "front wall 17ad" should be --front wall 17d--;

Col. 5, line 45, "bowed toflat" should be --bowed to flat--;

**MAILING ADDRESS OF SENDER:** Killworth, Gottman, Hagan & Schaeff LLP  
One Dayton Centre  
One South Main Street, Suite 500  
Dayton, Ohio 45402-2023

**PATENT NO.** 6,392,863 B1

No. of additional copies

➡ 1 of 2

Burden Hour Statement: This form is estimated to take 1.0 hour to complete. Time will vary depending upon the needs of the individual case. Any comment on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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PATENT NO : 6,392,863 B1

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MAILING ADDRESS OF SENDER: Killworth, Gottman, Hagan & Schaeff LLP  
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 One South Main Street, Suite 500  
 Dayton, Ohio 45402-2023

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No. of additional copies

 2 of 2

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 Col. 12, line 50, "A banknote validator according to any one of claim 1," should be --A banknote validator according to claim 1,--.

MAILING ADDRESS OF SENDER: Killworth, Gottman, Hagan & Schaeff LLP  
 One Dayton Centre  
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 Dayton, Ohio 45402-2023

PATENT NO. 6,392,863 B1

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SML



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Patent and Trademark Office  
ASSISTANT SECRETARY OF COMMERCE AND  
COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

INN0004PA

November 26, 2002

RECEIVED  
DEC 07 2002DOCKETED  
DEC 03 2002

Patent No : 6,392,863

Inventor : Peter Dunlop, Kevin Ashurst

Issued : May 21, 2002

**Re: Request for Certificate of Correction**

Consideration has been given your request for the issuance of a certificate of correction for the above-identified patent under the provisions of Rules 1.322.

Respecting, the alleged error in the Abstract should not be considered because the abstract is not in paragraph form. Therefore, no correction(s) is in order here under United States Codes (U.S.C.) 254 and the Code of Federal Regulation(C.F.R.) 1.322.

In view of the foregoing, your request in this matter is hereby denied.

A certificate of correction will issue to correct the remaining error noted in your request.

Further correspondence concerning this matter should be filed and directed to Decisions and Certificates of Correction Branch.

Mary F. Diggs  
Cecelia Newman, Supervisor  
Decisions and Certificate of Correction  
(703) 305-8309 or 305-8793

KILLWORTH, GOTTMAN, HAGAN& SCHAEFF LLP  
ONE DAYTON CENTRE  
ONE SOUTH MAIN STREET, STE. 500  
DAYTON, OH 45402-2023

COPY

Patent Number: 06392863

Section: Correction 22 of 23 pages

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CERTIFICATE OF CORRECTION

PATENT NO. : 6,392,863 B1  
DATED : May 21, 2002  
INVENTOR(S) : Peter Dunlop and Kevin Ashurst

Page 1 of 2

△ Full Text

Go to Page:

 Go

## Sections:

- Front Page
- Drawings
- Specifications
- Claims
- Correction

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1.

After the title, insert the following -- The present invention relates to a banknote validator. --;

Line 13, "have be en used" should be -- have been used --;

Column 5.

Line 27, "front wall 17ad" should be -- front wall 17d --;

Line 45, "bowed toflat" should be -- bowed to flat --;

Column 6.

Line 7, "A first tired wheel" should be -- A first tyred wheel --;

Line 8, "and a second tired wheels 43" should be -- and a second tyred wheel 43 --;

Lines 10 and 13, "second tired wheels 42, 43" should be -- second tyred wheels 42, 43 --;

Line 32, "Third and fourth tired wheels" should be -- Third and fourth tyred wheels --;

Line 33, "first and second tired wheels 42, 43" should be -- first and second tyred wheels 42, 43 --;

Line 34, "third and fourth tired wheels 50, 51" should be -- third and fourth tyred wheels 50, 51 --;

Line 63, "third and fourth tired wheels 50, 51." should be -- third and fourth tyred wheels 50, 51. --;

Column 7.

Line 45, "A fifth tired wheel 88" should be -- A fifth tyred wheel 88 --;

Line 48, "A sixth tired wheel 89" should be -- A sixth tyred wheel 89 --;

Line 51, "with the sixth tired wheel 89" should be -- with the sixth tyred wheel 89 --;

Line 53, "The sixth tired wheel 89" should be -- The sixth tyred wheel 89 --;

Line 58, "The fifth tired wheel 88" should be -- The fifth tyred wheel 88 --;

Column 8.

Line 13, "second tired wheel 42, 43." should be -- second tyred wheels 42, 43. --;

Column 9.

Line 33, "is alsofed to the" should be -- is also fed to the --;

Column 11.

Line 6, "second tired wheels 42, 43," should be -- second tyred wheels 42, 43, --;

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Do not  
Karl  
this  
1050

Patent Number: 06392863

Section: Correction 23 of 23 pages

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Go to Page:

 

Sections:

- [Front Page](#)
- [Drawings](#)
- [Specifications](#)
- [Claims](#)
- [Correction](#)

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,392,863 B1  
DATED : May 21, 2002  
INVENTOR(S) : Peter Dunlop and Kevin Ashurst

Page 2 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 11 cont'd.

Line 30, "according to the following algorithms" should be -- according to stored algorithms --;

Lines 36 and 48, "fourth tired wheels 50, 51" should be -- fourth tyred wheels 50, 51 --;

Line 61, "The fifth tired wheel 88" should be -- The fifth tyred wheel 88 --;

Column 12.

Line 1, "the first tired wheel 42," should be -- the first tyred wheel 42, --; and

Line 50, "A banknote validator according to any one of claim 1," should be -- A banknote validator according to claim 1, --.

Signed and Sealed this

Seventh Day of January, 2003

JAMES E. ROGAN  
Director of the United States Patent and Trademark Office

*Do not  
or supersede  
this  
1050*



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of

U.S. Patent No. : US 6,392,863 B1  
Issued : May 21, 2002  
Title : BANKNOTE VALIDATOR  
Docket No. : INN 0004 PA

Decisions and Certificates for Correction Branch  
Assistant Commissioner for Patents  
Washington, DC 20231

**CERTIFICATE OF MAILING**  
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231, on January 28, 2003.

*Susan M. Luna*  
Susan M. Luna, Patent Agent Reg. No. 38,769

Sir:

REQUEST FOR RECONSIDERATION

Applicants hereby submit a request for reconsideration regarding the request for certificate of correction (copy enclosed) originally filed September 16, 2002. Applicants received a letter (copy enclosed) dated November 26, 2002 indicating that the alleged error in the Abstract should be not considered because the abstract is not in paragraph form.

Accordingly, applicants are submitting herewith a new request for Certification of Correction which includes the Abstract in paragraph form. The errors in the Abstract occurred during the printing of the patent and, therefore, no fee is due. Two (2) copies of the required Certificate of Correction Form PTO/SB/44 are enclosed.

Respectfully submitted,  
KILLWORTH, GOTTMAN, HAGAN  
& SCHAEFF, L.L.P.

By *Susan M. Luna*  
Susan M. Luna  
Registration No. 38,769

One Dayton Centre  
One South Main St., Suite 500  
Dayton, Ohio 45402-2023  
Telephone: (937) 223-2050  
Facsimile: (937) 223-0724

SML/amm  
Encls.

**DINSMORE  
& SHOHL LLP****FACSIMILE TRANSMITTAL***from* **AMY M. MARSHALL**

October 22, 2003

Direct: 937-223-2612 / Fax: 937-223-0724 / amy.marshall@dinslaw.com

**To:** Ms. Newman

**Firm:** US PTO  
Decisions and Certificate of Correction Branch

**Fax Number:** 703/308-6672

**Client Number:** INN 0004 PA/40387.5

**Pages:** 11  
(including cover)

**Comments:** Pursuant to our telephone conversation, attached is a copy of the Request for Reconsideration along with a copy of our original Request for Certificate of Correction.

Please contact me if you have any questions.

If there are any problems in receiving this transmission, please call (937) 223-2050 immediately.  
Thank you.

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PLEASE STAMP OR OTHERWISE INDICATE DATE OF RECEIPT  
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Papers: Request for Reconsideration, PTO/SB/44 (2 copies), copy of originally filed Request for Certificate of Correction dated 09/16/2002 (5 pgs) and copy of letter dated 11/26/2002

Inventor(s): Peter Dunlop, Kevin Ashurst

Title: BANKNOTE VALIDATOR

Serial No.: 09/402,750

Patent No.: 6,392,863

Docket No.: INN 0004 PA

Date Due:

SML/amm  
01/28/2003

PTO/SB/44 (02-01)

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*Page 1081*

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--A banknote validator includes magnetic and optical sensors (305, 306, 307) and a non-return gate in its banknote path (80).

The magnetic sensor (307) comprises a magnetic circuit and an electronic circuit. The magnetic circuit comprising a yoke (402) and two giant magneto-resistors (400, 401) and the electronic circuit comprises a coil (407) arranged to generate a magnetic field in the yoke (402) and first and second feedback control loops. The first loop is responsive to the output of the first giant magneto-resistor (400) to energise the coil (407) so that the giant magneto-resistor operates in a predetermined region of its characteristic. The second loop is responsive to the differential between the giant-magneto-resistor outputs to generate a bias voltage for the second giant-magneto-resistor (401) tending to cause the differential to be zero.

The optical sensor (305,306) comprises a trapezoidal light guide (34, 104), a broadband light source (350) for illuminating a banknote via the light guide (34, 104) and sensors (351, 352, 353) for detecting light reflected from the banknote via the light guide (34, 104). Filters (354, 355, 356) are arranged in front of the sensors (351, 352, 353). The light guide (34,104) is inclined relative to the banknote path (6).

The non-return gate (80) does not need to be actively driven but falls when a banknote has passed and, when the banknote's direction of travel is reversed, guides the banknote along an accept path. If the banknote has not fully passed the non-return gate (80) when its direction is reversed, it is driven back to the validator's note insertion slot--

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PATENT NO. 6,392,863 B1

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